

Work Order ID 54014

November 25, 2009 3:17:59 PM

Page 1

Item ID: D3916-041

Accept

Setup Start

Revision ID:

Item Name: Aft Rib Assembly

Stop

Start Date: 11/26/2009 Start Qty: 1.00

Required Date: 12/11/2009 Req'd Qty: 1.00

Cust Item ID:

Customer:

PRELIMINARY ISSUE

Reference:

Approvals:

Process Plan: *mf*

Date: *09-11-25*

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3916

A-PRELIM

AJS 09.11.26

0.00



Large Fab

Large Fab

Memo

0.00

- 1- Cut tube 54"
- 2- Bend tube with manuel pipe bender as per dwg d3916-1
- 3- Drill and chamfer holes as per dwg D3916-1
- 4- Trim access tube material to finish size as per dwg D3916
- 5- ~~weld bushing as per dwg D3916~~
- 6- ~~grind welds flush~~

MATERIAL CERTIFICATION

REQ'D UPON DELIVERY

09/12/22

09/12/22

110



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

111

Weld bushing and grind weld Flush
S.S. Rod Batch: M109213

PD 10.01.04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54014

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Page 2

Item ID: D3916-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Aft Rib Assembly

Start Date: 11/26/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 12/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

2> S 10/04/04



130

Identify as per dwg & Stock Location: Basket

0.00



Packaging

Memo

0.00

Packaging

PD 10.01.04

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

PD0300A JAN
ME
10-01-06

POSITIVE RECALL

EFFECTIVE 01-12-01 AUTH U

RELEASED _____ DATE _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 25, 2009 3:17:59 PM

Page 1

Work Order ID: 54014

Parent Item: D3916-041RevA-PROTO

Parent Item Name: Aft Rib Assembly

Comments: IPP RevA: new issue DD 09.11.23 verified by:EC

Start Date: 11/26/2009

Required Date: 12/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3759-1RevA Bushing		Manufactured	No			100	Each	36.0000	4.0000			

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

WA

53442

36

36

100

f

164.6000

4.7368

B 54072 -> 3x PD 10.01.04

B 53442 -> 1x PD 10.01.04

~~4 PD 09.10.04~~

M304TS0.750W.049

Purchased

No

304 SQ Tube .75x.75x.049W

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

103240

106604

107460

109087

164.6

10

16.6

38

100

4.7368

11/09/12/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Receiving Report

Date: 8/8/09

Batch No: M129087

Supplier: MAGNA

Dart P/O: 7019

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection ok ☒ N/A ☒
 Work Order ok ☒ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 [Signature]

Production/Admin:

Date: 08/09/09
 Received/Costing: ACP 8763
 Initial: CP

Location: _____

MAGNA

INOXYDABLE

Magna Stainless division de CSM Inc.

525 Meloche Ave., Dorval (Québec) H9P 2W2

Tél.: (514) 631-1211 • Fax: (514) 631-0013

Sans frais / Toll free: 1-800-363-6646

ISO 9001-2000

N° FACTURE / INVOICE NO.

164382

VENDU À - SOLD TO

DART

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY

ONTARIO

K6A 1K7

EXPÉDIÉ À - SHIPPED TO

MEME - SAME

DATE	N° LIVR. - DEL. NO.	PAR - VIA	N° COMM. DU CLIENT CUST. ORDER NO.	CONDITIONS - TERMS	N° T.V.Q. - Q.S.T. NO.	N° T.P.S. - G.S.T. NO.	
Aug29/08	0174394	NIR:R-557065-1	7019		1213236471	881565899 RT0001	
QTE EXP QTY SHIPPED	DESCRIPTION			POIDS EXPÉDIÉ WEIGHT SHIPPED	PRIX - PRICE	UNITÉ UNIT	TOTAL
	304 180 GRIT						
5	3/4" SQ 18GA X 20' HEAT TUYU238460 Heat # 174394 SHIPPED WITH 174638				28.00	PCS	140.00
RECEIVED SEP 0 8 2008							
Sub-Total							140.00
G.S.T.							7.00

FRAIS D'ADMINISTRATION DE 1½% PAR MOIS (18% PAR ANNÉE) SUR COMPTE PASSÉ DÙ.
LE PRÉSENT CONTRAT SERA RÉGI PAR LES LOIS DE LA PROVINCE DE QUÉBEC ET COMME
AYANT PRIS NAISSANCE DANS LE DISTRICT JUDICIAIRE DE MONTRÉAL.
ADMINISTRATION CHARGES OF 1½% PER MONTH (18% PER YEAR) ON OVERDUE ACCOUNTS.
THE PRESENT AGREEMENT SHOULD BE GOVERNED BY THE QUEBEC LEGISLATION AND SHOULD
BE CONSIDERED AS HAVING ORIGINATED IN THE JUDICIAL DISTRICT OF MONTREAL.

TOTAL →

147.00

Dart Aerospace Ltd

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613) 632-3336
Fax: (613) 632-4443

Receiving Slip

Date Sep 2, 2008	Page 1
Receipt Number RCP00008763	

Purchase From:

Magna Stainless
525 avenue Meloche
Dorval, QC H9P 2W2
Canada

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
			VC-MAG002	PO00007019

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	M304TS0750W049	304 SQ Tube .75x.75x. MATERIAL: AISI 304/316 SS SQUARE TUBING B/N109087	100.0000	f	1.400000	140.00	Sep 02, 2008

Comments:

MAGNA

INDYDABLE

MAGNA STAINLESS DIV. DE CSM INC.
525 MELOCHE AVE.
DORVAL, QUEBEC H9P 2W2
(514) 631-1211 FAX: (514) 631-0013

COMMANDE
SALES ORDER

0174394

ADU À /
AD TO:

LIVRÉ À /
SHIP TO:

DART AEROSPACE LTD
270 ABERDEEN STREET
LAWKESBURY
ONTARIO

K6A 1K7

INSTRUCTIONS SPÉCIALES / SPECIAL INSTRUCTIONS

COMMANDE SALES ORDER	CODE DE CLIENT CUSTOMER CODE	BON D'ACHAT DU CLIENT CUSTOMER PURCHASE ORDER	N° DE TÉLÉPHONE DU CLIENT CUSTOMER TELEPHONE NUMBER	N° DE TÉLÉCOPIEUR DU CLIENT CUSTOMER FAX NO.		
0174394	DART	7019	613 632-5200	632-1053		
DATE DE LIVRAISON SHIP DATE	CONDITIONS / TERMS	DATE COMMANDEE DATE ORDERED	DATE REQUISE DATE REQUIRED	DATE LIVREE DATE DELIVERED	N° DU VENDEUR SALES REF. NO.	
NIR:R-557065-1	NET 30	Aug-26-08	Aug-29-08		15 26 EB	
CONTROLE DE QUALITE DU CLIENT REQUIS CUSTOMER QUALITY RELEASE REQ'D		CONTROLE DE QUALITE DE MAGNA REQUIS MAGNA QUALITY RELEASE REQ'D		PREPAIE PREPAID	PERCEVOIR COLLECT	
QUALITEE QUALITY	UNITE UNIT	N° DE COULEE HEAT NUMBER	DESCRIPTION	QTE LIVREE QTY SHIPPED	PRIX PAR PRICE PER	INSTRUCTIONS DE L'USINE PLANT INSTRUCTIONS
500 5	pcs	304 180 GRIT 3/4" SQ 18GA X 20		100/47#		5 pcs CK358
TOTAL:				LBS		

IBRE DE PAQ.
IBER OF BOL'S

MTR-AVEC COMMANDE
MTR'S-WITH ORDER ☒

POSTE
MAIL ☐ TÉLÉCOPIEUR
FAX ☐

PACKING SLIP / BON D'EMBALLAGE

ge: 1
11:28:12 20080826

N° DE COULEE ÉTAMPER SUR LE CÔTÉ
HEAT NO. STAMP ONE END ☐

MATÉRIEL REÇU EN BON ÉTAT PAR / MATERIAL RECEIVED IN GOOD CONDITIONS BY:



WINNER STAINLESS STEEL TUBE CO.,LTD

ORIGINAL



ADDRESS: 3RD INDUSTRIAL PARK ,XIAOBU VILLAGE, HUASAN
TOWN,HUADU DISTRICT, GUANGZHOU, P.R.C.
TEL: +86-20-86847851 FAX: +86-20-86941744

MILL TEST CERTIFICATE

Customer:

Issued Date:2006/10/12

Order No.: 119

Certificate No.:GUL-F684

Article:Stainless steel mechanical structures welded tube						Specification: ASTM A554-03							
Item No.	Size	Length	Qty,Pcs	Net Weight	Type	Heat No.	Annealed Temperature (°F)	Hold Time (minute)	Cooling	Surface Finish	Hydrostatic Test (psi)	ET	
6~7#	3/4"SQ×18GA	20'	200	816.86	MT304	TU-YU238460	—	—	—	180Grit	—	—	
8#	3/4"SQ×18GA	20'	48	196.05	MT304	TU-YU238460	—	—	—	180Grit	—	—	
9~12#	3/4"SQ×16GA	20'	400	2145.80	MT304	TU-YU238951	—	—	—	180Grit	—	—	
13#	3/4"SQ×16GA	20'	27	144.84	MT304	TU-YU238951	—	—	—	180Grit	—	—	
14#	3/4"SQ×16GA	20'	19	101.93	MT304	TU-YU142400	—	—	—	180Grit	—	—	
Chemical Composition (%)									Mechanical Test				
	C	Mn	P	S	Si	Ni	Cr	Mo	T. S. (Ksi)	Y. S.(Ksi)	Elongation(%)	Flattening	
MIN						8.00	18.00	—	≥75	≥30	≥35	≤2/3D	
MAX	0.080	2.00	0.040	0.030	1.00	11.00	20.00	—					
6~7#	0.025	1.49	0.038	0.004	0.47	8.08	18.14	—	95	51	52	good	
8#	0.025	1.49	0.038	0.004	0.47	8.08	18.14	—	95	51	52	good	
9~12#	0.026	1.44	0.031	0.005	0.36	8.09	18.29	—	99	49	55	good	
13#	0.026	1.44	0.031	0.005	0.36	8.09	18.29	—	99	49	55	good	
14#	0.023	1.41	0.035	0.007	0.44	8.09	18.21	—	92	50	51	good	
Remarks:						We, Winner Stainless Steel Tube Co., Ltd., hereby certify that the products described herein have been manufactured in accordance with the standards and specifications specified as above and meet the requirements as per order.							
1. Corrosion test: as per ASTM-A262, Practice E accepted. 2. Dimensions & Visual good. 3. Materials are free from mercury contamination.						Q. C. Manager/Work Inspector:							

536 93 536 94 536 95



Purchase Order

Date Aug 25, 2008	Page 1
Purchase Order Number PO00007019	

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613)632-9577
Fax: (613)632-1053

Vendor Address:

Magna Stainless
525 avenue Meloche
Dorval, QC H9P 2W2
Canada
Phone (800) 363-6646
Fax (514) 631-0013

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Contact	Vendor Number VC-MAG002	PO Date Aug 25, 2008	Terms N30	Ship Via yours	Expected Arrival Aug 26, 2008
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Qty. Ordered	Item Number	Description	Expected Arrival	Drop-Ship	Unit Cost	UOM	Extended Price
320.0000	M304S16GA	304/316 Sheet .063 Comments: MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH	8/26/2008	No	6.406250	sf	2,050.00
320.0000	M304S22GA	304/316 .032 Sheet Comments: AS ABOVE	8/26/2008	No	3.281250	sf	1,050.00
100.0000	M304TS0750W049	304 SQ Tube .75x.75x.0 Comments: MATERIAL: AISI 304/316 SS SQUARE TUBING	8/26/2008	No	1.400000	f	140.00
50.0000	M6061T6A1000W125	6061T6 ANGLE 1.00 x 1. Comments: MATERIAL: 6061-T6 /T6510/6511 ALUMINUM ANGLE PER AMS-QQ-A-200/8	8/26/2008	No	0.675000	f	54.00
200.0000	M6061T6TS1000W12	6061T6 SQ TUBE 1.00 x 1.8 Comments: MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 SQUARE TUBING PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160	8/26/2008	No	1.500000	f	300.00

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

M108057
M108057

Comments:**Tax Summary:**

GST 179.70
ONTPST 0.00

Less:

included tax

0.00

Subtotal

3,594.00

Total tax

179.70

Total purchase order in

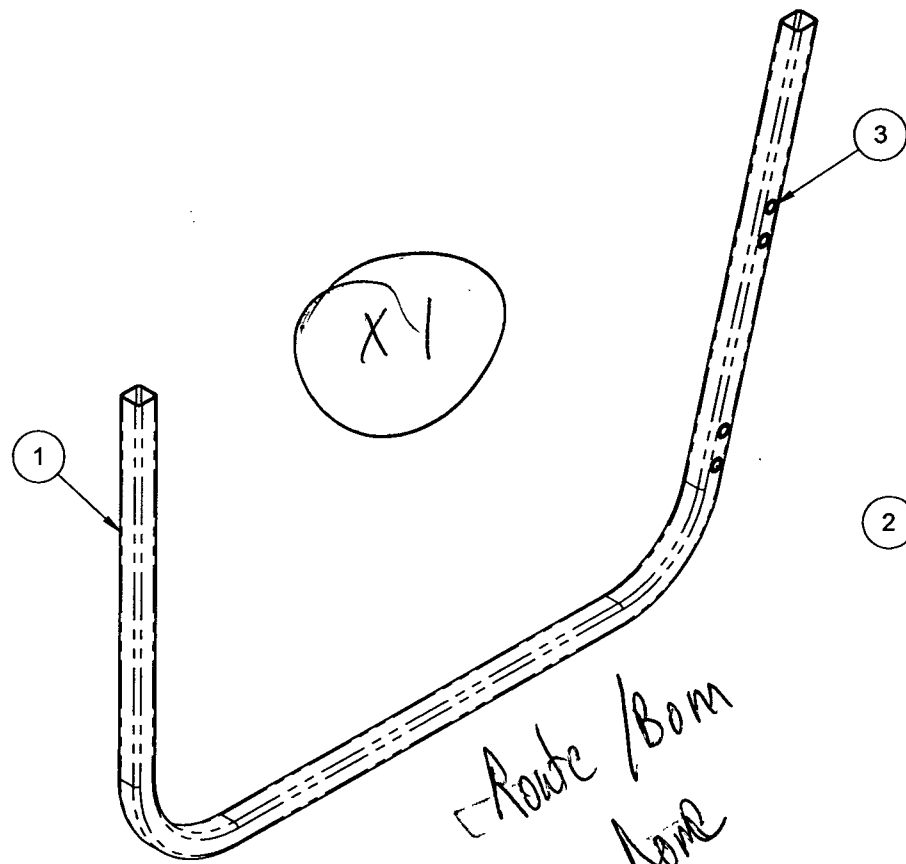
CAD Dollars

3,773.70

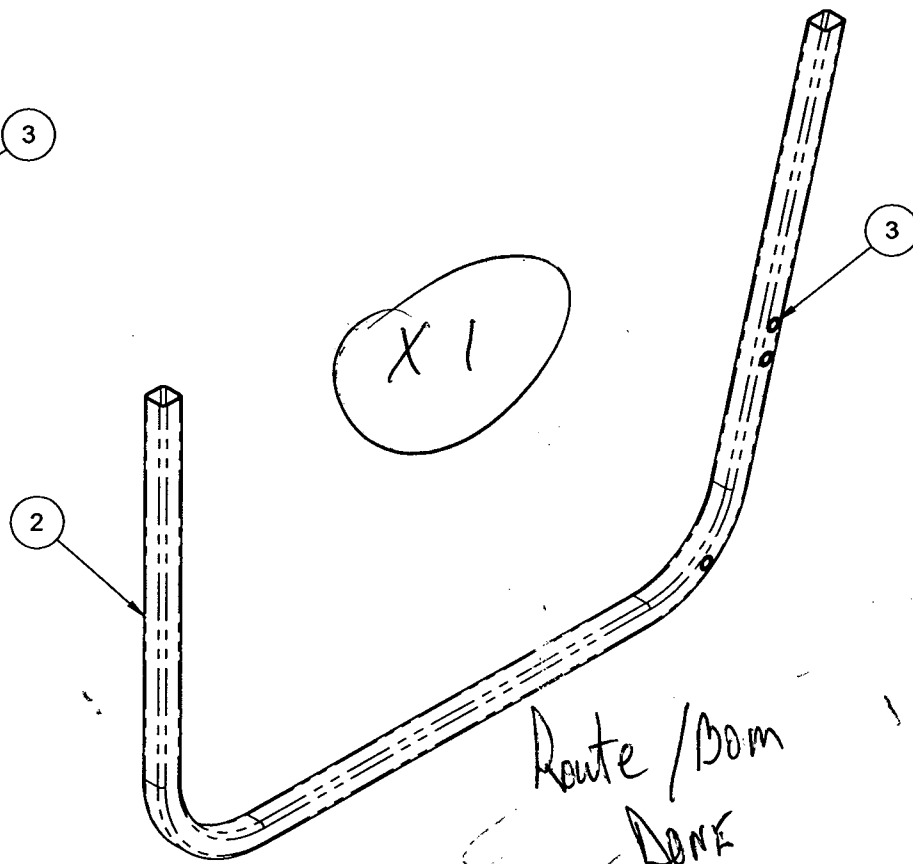
Entered By: CL CLAVOIE

Approved By:

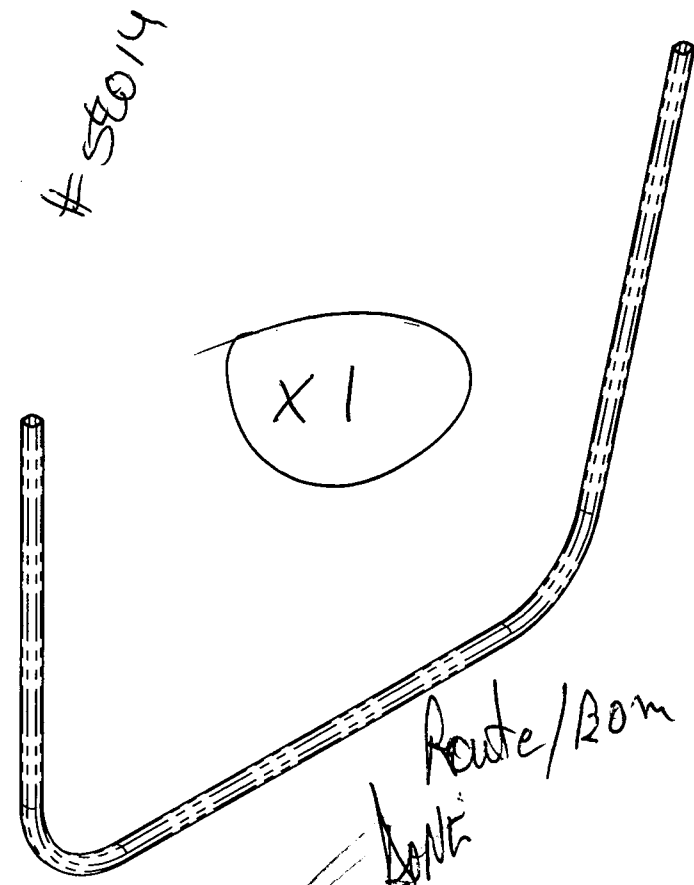
ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D3916-041	AFT RIB ASSY
		X	D3916-043	FWD RIB ASSY
1	1		D3916-1	AFT RIB
2		1	D3916-3	FWD RIB
3	4	3	D3759-1	BUSHING



D3916-041 AFT RIB ASSY




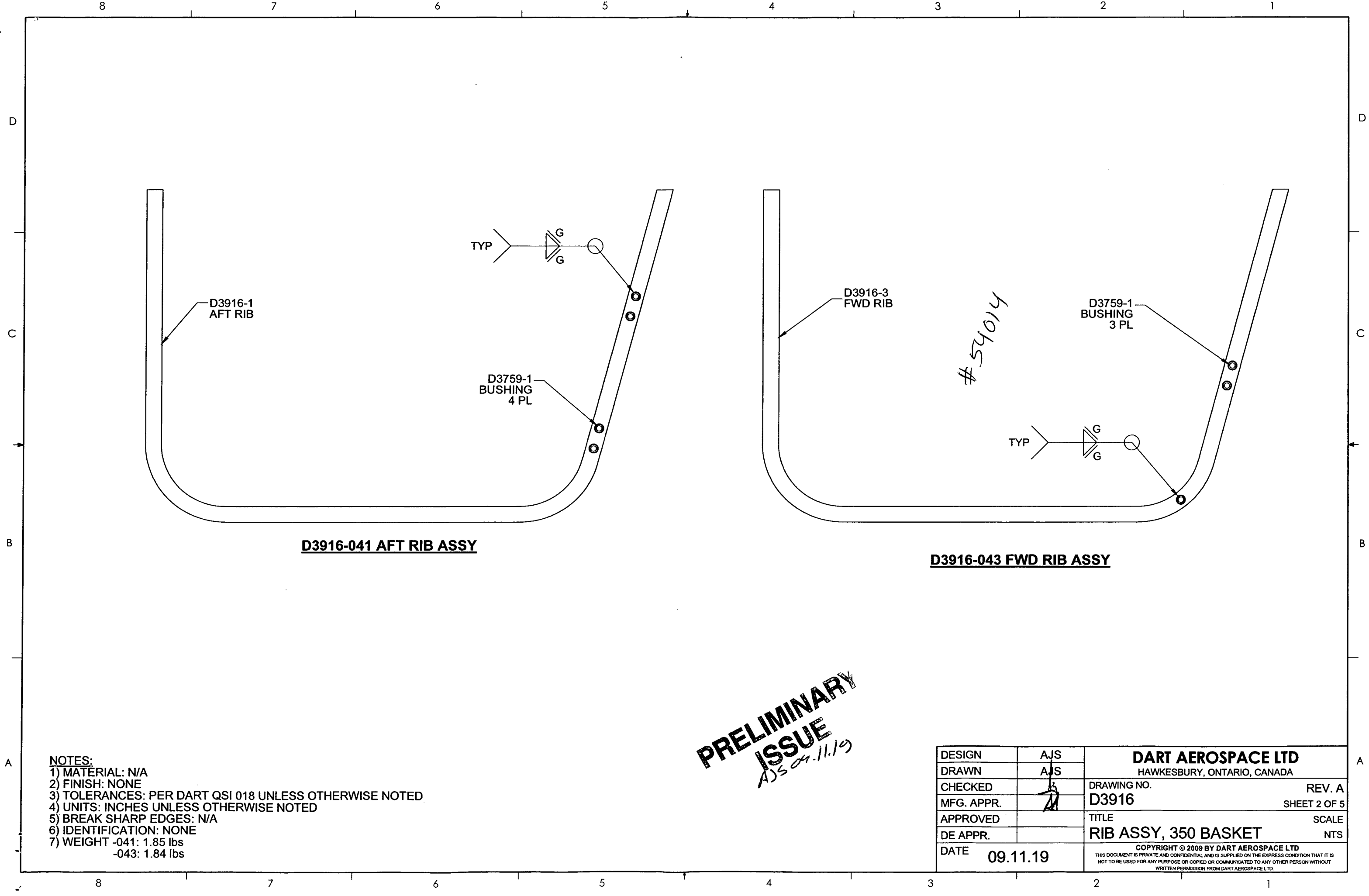
D3916-043 FWD RIB ASSY

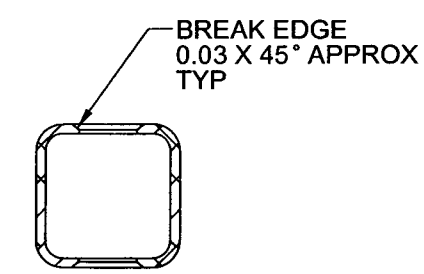
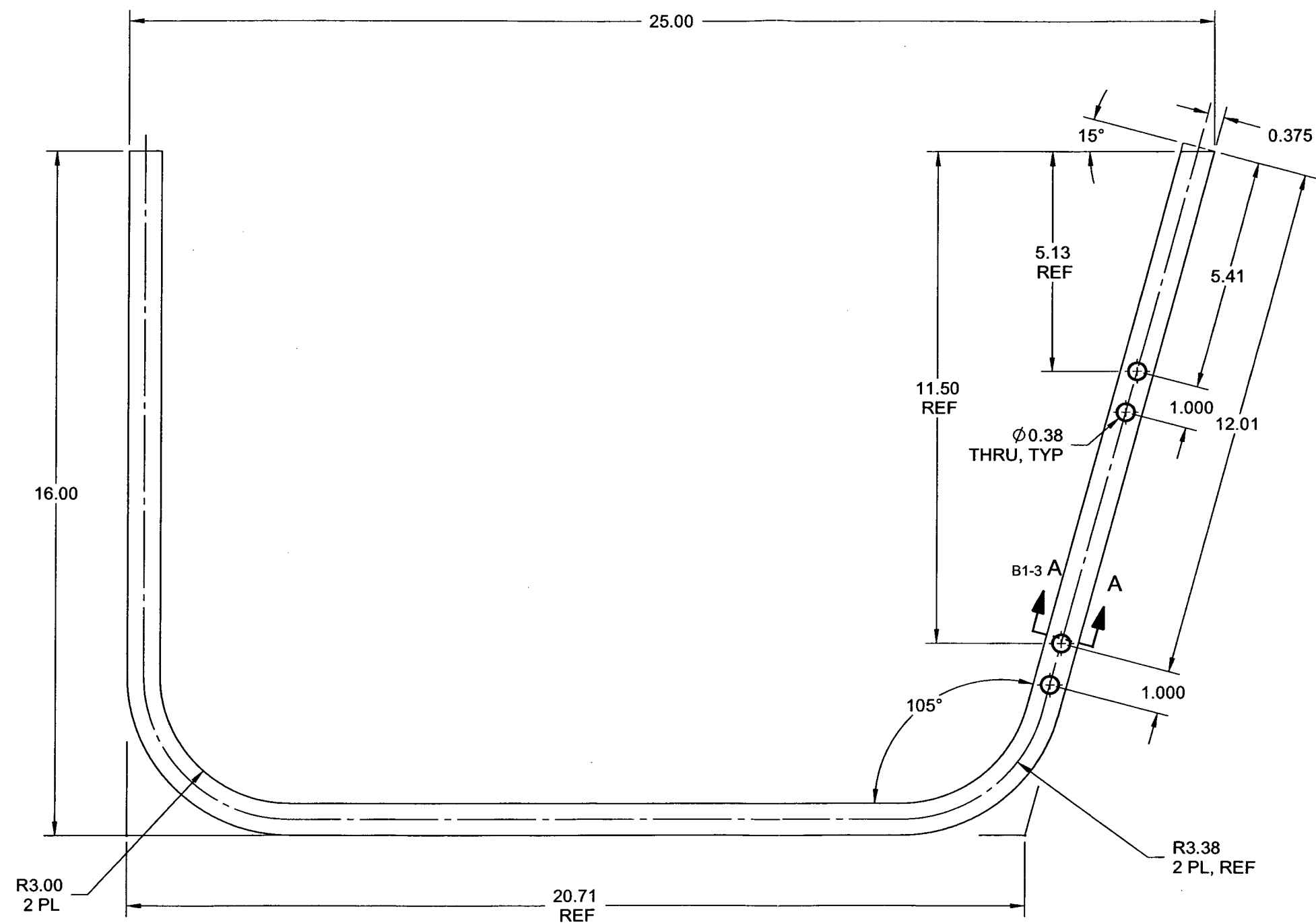


D3916-5 LIGHT RIB

PRELIMINARY
ISSUE
AJS 09.11.19

A	PRELIMINARY (1)		AJS	09.11.19
REV.	DESCRIPTION		BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AJS			
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		D3916	SHEET 1 OF 5	
APPROVED		TITLE	SCALE	
DE APPR.		RIB ASSY, 350 BASKET	NTS	
DATE	09.11.19	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		





SECTION A-A C4-3
SCALE 3X

9 D3916-1 AFT RIB

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC. M304TS
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.80 lbs
 - 9) TUBE FLAT LENGTH 50.83 REF

**PRELIMINARY
ISSUE**
AJS 09.11.19

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3916	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		RIB ASSY, 350 BASKET	NTS
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